We claim:

-14.

A composition comprising:

(a) from 1 to 99% by weight of a pigment (I) having a primary particle size of from 5 nm to 100 μm which is a solid Ia or a compound Ib which acts as cathode material in electrochemical cells or a compound Ic which acts as anode material in electrochemical cells or a mixture of the solid Ia with the compound Ib or the compound Ic,

(b) from 1 to 99% by weight of a polymeric material (II) which comprises:

(IIa) from 1 to 100% by weight of a polymer or copolymer (IIa) which has, as part of the chain, at the end(s) of the chain and/or laterally on the chain, reactive groups (RG) which are capable of crosslinking reactions under the action of heat and/or UV radiation, and

(IIb) from 0 to 99% by weight of at least one polymer or copolymer (IIb) which is free of reactive groups RG.

15. A composition as claimed in claim 14, wherein the pigment I is a solid Ia which is selected from the group consisting of an inorganic solid selected from the group consisting of oxides, mixed oxides, silicates, sulfates, carbonates, phosphates, nitrides, amides, imides and carbides of the elements of main groups I., II., III. and IV. and transition group IV. of the Periodic Table; a polymer selected from the group consisting of polyethylene, polypropylene, polystyrene, polytetrafluoroethylene, polyvinylidene fluoride, polyamides and polyimides; and a solids dispersion comprising such a polymer; and a mixture of two or more thereof.

16. A composition as claimed in claim 14, wherein the pigment I is a compound Ib which acts as cathode material in electrochemical cells and is selected from the group consisting of $LiCoO_2$, $LiNiO_2$, $LiNi_xCo_yO_2$, $LiNi_xCo_yAl_zO_2$, where $0<x,y,z\leq 1$, Li_xMnO_2 ($0<x\leq 1$), $Li_xMn_2O_4$ ($0<x\leq 2$), Li_xMoO_2 ($0<x\leq 2$), Li_xMnO_3 ($0<x\leq 1$), Li_xMnO_2 ($0<x\leq 2$), $Li_xMn_2O_4$ ($0<x\leq 2$), $Li_xV_2O_4$ ($0<x\leq 2.5$), $Li_xV_2O_3$ ($0<x\leq 3.5$), Li_xVO_2 ($0<x\leq 1$), Li_xWO_2 ($0<x\leq 1$), Li_xWO_3 ($0<x\leq 1$), Li_xTiO_2 ($0<x\leq 1$), $Li_xTi_2O_4$ ($0<x\leq 2$), Li_xRuO_2 ($0<x\leq 1$), $Li_xFe_2O_3$ ($0<x\leq 2$), $Li_xFe_3O_4$ ($0<x\leq 2$), $Li_xCr_2O_3$ ($0<x\leq 3$), $Li_xCr_3O_4$ ($0<x\leq 3.8$), $Li_xV_3S_5$ ($0<x\leq 1.8$), $Li_xTa_2S_2$ ($0<x\leq 1$), Li_xFeS ($0<x\leq 1$), Li_xFeS_2 ($0<x\leq 1$), Li_xNbS_2 ($0<x\leq 2.4$), Li_xMoS_2 ($0<x\leq 3$), Li_xTiS_2 ($0<x\leq 2$), Li_xZrS_2 ($0<x\leq 2$), Li_xNbSe_2 ($0<x\leq 3$), Li_xVSe_2 ($0<x\leq 1$), Li_xNiPS_2 ($0<x\leq 1.5$), Li_xFePS_2 ($0<x\leq 1.5$), $LiNi_xB_{1-x}O_2$ ($0<x<1$), $LiNi_xAl_{1-x}O_2$ ($0<x<1$), $LiNi_xMg_{1-x}O_2$ ($0<x<1$), $LiNi_xCo_{1-x}VO_4$ ($1 \geq x \geq 0$), $LiNi_xCo_yMn_zO_2$ ($x+y+z = 1$), $LiFeO_2$, $LiCrTiO_4$, $Li_aM_bL_cO_d$ ($1.15 \geq a > 0$; $1.3 \geq b+c \geq 0.8$; $2.5 \geq d \geq 1.7$; M = Ni, Co, Mn; L = Ti, Mn, Cu, Zn, alkaline earth metal), $LiCu_X^{II}Cu_Y^{III}Mn_{(2-(x+y))}O_4$ ($2>x+y\geq 0$), $LiCrTiO_4$, $LiGa_xMn_{2-x}O_4$ ($0.1\geq x\geq 0$), poly(carbon sulfides) of the structure: $-[C(S_x)]_n-$, V_2O_5, a mixture of two or more thereof, and a mixture of compound Ib with the solid Ia; and the composition further comprises from 0.1 to 20% by weight, based on the total weight of components I to III, of conductive carbon black.

17. A composition as claimed in claim 14, wherein the pigment I is a compound Ic which acts as anode material in electrochemical cells and is selected from the group consisting of lithium, a lithium-containing metal alloy, micronized carbon black, natural and synthetic graphite, synthetically graphitized carbon powder, a carbon fiber,

titanium oxide, zinc oxide, tin oxide, molybdenum oxide, tungsten oxide, titanium carbonate, molybdenum carbonate, zinc carbonate, $Li_xM_ySiO_Z$ ($1>x\geq 0.1>y\geq 0$, $z>0$), Sn_2BPO_4, conjugated polymers, lithium metal compounds Li_XM and a mixture of two or more thereof and a mixture of the compound Ic with the solid Ia; and the composition further comprises up to 20% by weight, based on the total weight of the components I to III, of conductive carbon black.

18. A composition as claimed in claim 14, wherein the polymer IIa has, as part of the chain, at the end(s) of the chain and/or laterally on the chain, at least one reactive group RGa which in the triplet excited state under the action of heat and/or UV radiation is capable of hydrogen abstraction and has, as part of the chain, at the end(s) of the chain and/or laterally on the chain, at least one group RGb which is different from RGa and is coreactive with RGa, with at least one group RGa and at least one group RGb being present on average over all polymer molecules.

19. A composition as claimed in claim 14, wherein the polymer IIa is a polymer or copolymer of an acrylate or methacrylate and has reactive groups RGa which comprise benzophenone units and reactive groups RGb which comprise dihydrodicyclopentadiene units.

20. A composition as claimed in claim 14, wherein the polymer IIb is selected from the group consisting of a polymer or copolymer of vinyl chloride, acrylonitrile, vinylidene fluoride; a copolymer of vinyl chloride and vinylidene chloride, vinyl chloride and acrylonitrile, vinylidene fluoride and hexafluoropropylene, vinylidene fluoride and hexafluoropropylene; a terpolymer of vinylidene fluoride and hexafluoropropylene together with a member of the group consisting of vinyl fluoride, tetrafluoroethylene and a trifluoroethylene.

21. A composition as claimed in claim 14, wherein the polymer IIa is a polymer and the polymer IIb is a copolymer of vinylidene fluoride and hexafluoropropylene.

22. A composite comprising at least one first layer which comprises a composition as claimed in claim 14 comprising a compound Ib or a compound Ic, and at least one second layer which comprises a composition as claimed in claim 14 which comprises a solid 1a and is free of compounds Ic and Ib.

23. Method of using a composition as claimed in claim 14 for producing a solid electrolyte, a separator or an electrode or in a sensor, an electrochromic window, a display, a capacitor or an ion-conducting film.

24. Method of using a composite as claimed in claim 22 for producing a solid electrolyte, a separator or an electrode or in a sensor, an electrochromic window, a display, a capacitor or an ion-conducting film.

25. A solid electrolyte, separator, electrode, sensor, electrochromic window, display, capacitor or ion-conducting film, in each case comprising a composition as claimed in claim 14.

26. A solid electrolyte, separator, electrode, sensor, electrochromic window, display, capacitor or ion-conducting film, in each case comprising a composite as claimed in claim 22.

27. An electrochemical cell comprising a solid electrolyte, a separator or an electrode as claimed in claim 25 or a combination of two or more thereof.

28. An electrochemical cell comprising a solid electrolyte, a separator or an electrode as claimed in claim 26 or a combination of two or more thereof.

29. Method of using of a polymer IIa as defined in claim 14 as crosslinker system in a solid electrolyte, a separator or an electrode. --